

REMARKS

Claims 1-26 are pending in the present application. In the Office Action mailed August 1, 2006, the Examiner rejected claims 1, 5-17, and 19-26 under 35 U.S.C. §103(a) as being unpatentable over DeCoster et al. (USP 6,103,994). The Examiner next rejected claims 1, 5-17, and 19-26 under 35 U.S.C. §103(a) as being unpatentable over Kneisley et al. (5,777,295).

Claims 2-4 and 18 were indicated as containing allowable subject matter. Such indication is appreciated.

Applicant seeks clarification on the status of the drawings filed with the present application, as the Examiner did not indicate whether the drawings were accepted or objected to on the Office Action Summary page.

The Examiner rejected claims 1, 10, 17, and 26 under §103(a) as being unpatentable over DeCoster et al., stating that “[t]he system of DeCoster et al. (6,103,994) will detect whether or not a suitable remote control device is connected for the welding procedure selected in the power supply system and will override the remote control process if the wrong remote control device is connected” and that “[i]t is considered obvious that this feature constitutes detection of a ‘control irregularity’, ‘performance abnormality’ or ‘remote control malfunction’ because the remote control device 30, 31, or 32 will not function in a normal or expected manner if it does not match the selected welding process.” *Office Action*, August 1, 2006, p. 2-3.

While Applicant respectfully disagrees with the Examiner’s position, Applicant has elected to amend claim 1. As amended, claim 1 calls for a welding-type power source controller having an input to receive feedback of a remote control process of a welding-type process and a processor configured to first ensure that a remote control is operationally engaged, and then continue to receive the feedback and override the remote control process if a control irregularity is detected. As disclosed in the present invention, a welding-type system 10 includes a monitoring processor 29 configured to monitor a remote control 14 configured to control a welding-type process. The monitoring processor is configured to first determine whether a remote control 14 is operationally engaged. The monitoring control 29 then continues to receive feedback via an input and determines whether there is a control irregularity in the remote control process and, if so, to override the remote control process. *Application*, ¶¶ 22 and 24.

DeCoster et al. fails to teach, disclose, or suggest a processor configured to continue to receive feedback from a remote control process after an initial determination of the operational engagement of the remote control has been made. Rather, DeCoster et al. discloses a control circuit 16 configured to control an operating parameter in a welding device by way of either an

operating parameter selector signal or a remote device 29 signal. Control circuit 16 is configured to make an initial identification of the remote device type connected to the welding system and determine whether that remote device 29 is operable with a selected welding process. *DeCoster et al.*, Col. 8, Ins. 1-11. That is, control circuit 16 is configured to merely determine a remote device type by way of a remote device signal sent thereto in the form of a voltage amount (VDC). *Id.* at Col. 8, Ins. 61-65. Thus, after an initial determination of the remote device type via the remote device signal, control circuit 16 is not configured to receive additional feedback from the remote device 29 to detect a possible control irregularity. The control circuit 16 is only configured to make an initial determination of whether or not a proper remote device 29 is connected for the desired welding process. Such a control circuit is far different from the processor called for in claim 1, which is configured to first ensure that a remote control is operationally engaged, and then continue to receive the feedback and override the remote control process if a control irregularity is detected. As DeCoster et al. fails to teach, disclose, or suggest such a processor, claim 1, and the claims dependent therefrom, are believed patentably distinct thereover.

The Examiner also rejected claim 10 under §103(a) over DeCoster et al. Claim 10 calls for, in part, a method of controlling a welding-type process including the step of monitoring performance of the remote controlling of a welding-type power source from a secondary control and redirecting control of the welding-type power source to a primary control upon detecting a performance abnormality. That is, the welding-type system 10 of the present invention includes a monitoring system 29 that monitors control commands sent by the remote control 14 once control of the output for the welding-type process has been assumed by the remote control. *Application*, ¶21. Such monitoring of performance of the remote controlling requires remote control operation, and therefore, is not taught or even suggested by DeCoster et al.

DeCoster et al. discloses a control circuit 16 configured to control an operating parameter in a welding device by way of either an operating parameter selector signal or a remote device signal. Control circuit 16 is configured to identify the remote device type connected to the welding system and determine whether that remote device 29 is operable with a selected welding process. *DeCoster et al.*, Col. 8, Ins. 1-11. If the remote device 29 is not capable of controlling the selected welding process, the control circuit 16 assumes control of the welding process to the operating parameter selector signal. The control circuit 16 of DeCoster et al. is not, however, configured to “monitor performance” of the remote device as called for in claim 10. The simple determination of whether a proper remote device is connected for the desired welding process is

clearly not a monitoring of the performance of that remote control and is far different from the monitoring of performance called for in claim 10. As such, DeCoster et al. fails to teach, disclose, or even suggest that which is called for in claim 10 and the claims dependent therefrom.

Similarly, DeCoster et al. also fails to teach, disclose or suggest that which is called for in claim 17. Claim 17 calls for, in part, a welding-type apparatus having a remote control to control output of welding-type power, a monitoring control to monitor the remote control, and a backup control to assume control of the welding-type process upon detection of a remote control malfunction.

As stated above, the welding-type device 16 of the present invention includes a monitoring system 29 that monitors control commands sent by the remote control 14. To monitor a device, as is commonly defined, involves “watching over” or “keeping track of” that device. *See Meriam Webster Online; see also Wiktionary* (copies attached). This clearly implies that such a device is watched over or kept track of over a period of time, and not for just a specific instant, as is the case in the cited prior art.

DeCoster et al. fails to disclose such a monitoring system. Rather, the control circuit 16 in DeCoster et al. is only configured to identify the remote device type and determine whether that remote device is operable with a selected welding process. *Decoster et al.*, Col. 8, Ins. 1-11. Such a determination is not “monitoring” the remote device as defined above and as is called for in claim 17. The control circuit 16 of DeCoster et al. is only configured to make an initial, instantaneous determination of whether control of the welding process should be assumed by the remote control in the first place. Since the control circuit 16 is not configured to actually “monitor” the remote control after this initial determination has been made, it cannot be said to teach or disclose that which is called for in claim 17. Further, there is no disclosure in DeCoster et al. that indicates any action if a malfunction of the remote control is detected, as is specifically called for in claim 17. Connecting the wrong remote control is not akin to detection of a malfunction of the remote control. As such, that which is called for in claim 17, and the claims dependent therefrom, is believed patentably distinct over the DeCoster et al. reference.

Claim 26 was also rejected under DeCoster et al. Claim 26 calls for, in part, a welding-type apparatus having a remote means for controlling the welding-type apparatus and a means for monitoring the remote means. DeCoster et al. simply does not disclose a control circuit capable of monitoring the remote control therein. That is, DeCoster et al. discloses that control circuit 16 is merely configured to detect connection of a remote device 29 and determine if the remote device 29 is compatible with a selected welding process. This is far different than the monitoring

of the remote control that is called for in claim 26 of the present invention and as is defined above. As such, claim 26, and the claims dependent therefrom, are believed patentably distinct over DeCoster et al.

The Examiner also rejected claims 1, 10, 17 and 26 under §103(a) as being unpatentable over Kneisley et al., stating that “[t]he system of Kneisley et al. (5,777,295) will detect whether or not a remote control device is connected at plug 34 for whatever reason, intentional or unintentional” and that “[i]t is considered obvious that this feature constitutes detection of a ‘control irregularity’, ‘performance abnormality’ or ‘remote control malfunction’ because the system of Kneisley et al.... will detect the situation where the remote control device is accidentally not plugged into the power supply.” *Office Action*, supra at 3-4. Again, Applicant respectfully disagrees with the Examiner’s assertion.

Kneisley et al. discloses a welder 10 that includes a control circuit configured to allow operation of the welder 10 via a local mode and a remote mode. During a remote mode, welding current in welder 10 is adjustable by a remote device. *Kneisley et al.*, Col. 3, Ins. 28-46. In order to switch from a remote mode of operation to a local mode of operation, control circuit detects whether the remote device is connected to the welder via a connector 34. If connector 34 is unplugged, control circuit detects the disconnection and shifts operation of the welder 10 from a remote mode to a local mode. *Id.*

The amendment to claim 1 and the arguments set forth above regarding claims 10, 17, and 26 also serve to distinguish those claims, and the claims dependent therefrom, over Kneisley et al. Similar to DeCoster et al., the control circuit of Kneisley et al. is merely configured to detect an initial connection status of a remote control device. The control circuit of Kneisley et al. is not configured to receive any sort of feedback from the remote device therein after first ensuring that the remote control is operationally engaged, nor is it configured to monitor the operation of the remote device to determine any sort of control irregularity, abnormality, or malfunction. In fact, the only function performed by the control circuit in Kneisley et al. regarding the remote device is the determination of whether the remote device is connected thereto via the connector 34. That is, the control circuit is not even configured to make a determination of whether the correct remote device is connected as in DeCoster et al. As such, the teachings and disclosure of Kneisley et al. is incapable of rendering claims 1, 10, 17, and 26 obvious thereover. Therefore, claims 1, 10, 17 and 26, and the claims dependent therefrom, are believed patentably distinct over Kneisley et al.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-29.

A fee in the amount of \$350.00 is concurrently being paid via EFS-Web for fees associated with entering the claims newly presented herein.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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¹The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2623. Should no proper payment be enclosed herewith, as by credit card authorization being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-2623. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extensions under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2623. Please consider this a general authorization to charge any fee that is due in this case, if not otherwise timely paid, to Deposit Account No. 50-2623.